

A newsletter for the employees and friends of the Y-12 National Security Complex

Privately financed buildings get the go ahead from DOE

Secretary of Energy Samuel Bodman has notified Congress of the U.S. Department of Energy's intent to transfer excess land to the private sector, the last step in the approval process for new state-of-the-art privately financed buildings proposed at Y-12.

With the final approval in place, groundbreaking is expected to take place in December with completion in about 18 months.

Nearly 1,500 employees will move into these new facilities. Construction of these facilities will radically reduce the Y-12 site footprint.

The proposed new buildings will be built with private-sector financing totaling more

than \$100 million; over the next 25 years, this approach could save nearly \$100 million in reduced operating, maintenance and renovation costs. The Industrial Development Board of the City of Oak Ridge will issue bonds to finance the project, which is being developed by Lawler-Wood.

The project also is expected to increase tax revenue for Oak Ridge and Anderson County.

"It's taken a little longer than we had hoped, but these two innovative new buildings are the cornerstone of our modernization efforts and represent the continued momentum toward a bright future for BWXT Y-12," Dennis Ruddy, Y-12 president and general manager, said.

The three-story, 450,000-square-foot Production Interface Building will contain office space for 1,200 people, a cafeteria, an occupational health center laboratory and conference space. The building is to be located north of the site of the former administration building, which was demolished in 2004.

The 100,000-square-foot Public Interface Building will contain office space for 300 people, a visitor's center, badging office and a public exhibit center. This building will be constructed on the area at the intersection of Bear Creek and Scarboro roads.

Y-12's Mentor-Protégé Program helps SCSU

Ken Lewis of Safety Analysis Engineering is helping South Carolina State University set up a nuclear chemistry program. Already his nine-month effort has garnered \$1.38 million in National Nuclear Security Administration funding for the program.

Lewis's assignment to the school is part of Y-12's Mentor-Protégé Program, which helps historically black colleges and universities establish hard science programs. The program was praised by Secretary of Energy Samuel Bodman during his August visit to Y-12.

In addition to receiving the NNSA funding, Lewis has obtained \$103,000 in state and federal grants to buy equipment.

With the NNSA grant money, SCSU plans to buy more radiological equipment, provide student scholarships and support a new nuclear chemistry faculty member for two years.

Lewis says, "The Y-12 Mentor-Protégé Program at SCSU is working magnificently. It's a win-win situation for both Y-12 and SCSU. The programs we're helping get established are producing students whose skills will fit in with Y-12 and national security needs."

Through the program, a recent SCSU computer sciences graduate was hired in a permanent position at Y-12. This summer, three engineering technology students worked as interns at Y-12, and

a faculty member and a nuclear engineering senior worked at SCSU on a Y-12 project. Patricia Glenn, a senior in the nuclear engineering program, is currently working as a co-op student at Y-12.



Above are some of the SCSU nuclear engineering majors. Left to right are Aundrie Blanchard, Deidra McCray, Chester Rodrigues, Vanna Gaffney and Slavica Grdanovska. In the background is a personnel contamination monitor on loan from Y-12.

Denny's desk Volunteering in our communities



At Y-12, we are constantly working together to make our communities better. With the recent devastation in Louisiana, Mississippi, Alabama and Texas as a result of Hurricanes Katrina and Rita, Y-12 employees stepped up to the plate once again and-with matching funds-donated well over \$60,000 to relief efforts. That says a lot about our employees and the difference you make every day in the lives of others.

Unfortunately, with all of the disaster relief activity and focus on the Gulf region, many of our local charitable agencies have suffered. These local organizations also depend on our generosity in order to help people in need in surrounding communities. There are several ways that we can continue to help these local agencies:

- give generously to the United Way (contributions go to various local agencies to help those in need),
- give of your time (our recent Day of Volunteering involved more than 400 employees working for more than 30 agencies) and
- give of your knowledge (many of our employees have expertise that can help others in the community).

With our restructured United Way Campaign, we raised more than \$27,000 during several events this year, which compares favorably to the \$15,000 you contributed last year. The aggressive

campaign this year included a chili cookoff, doughnut-eating contest, rib cook-off, 2005 cookbook addition and a miniature golf tournament. With totals still being finalized for the salary contributions, we anticipate a banner year for the program.

I also was pleased to see so many of you and your families participate in the Day of Volunteering Oct. 15. This type of event gives us the opportunity as individuals and as a company to give back to the towns and cities that have supported Y-12 for more than 60 years.

I appreciate everyone who participated, and I encourage you to continue these good works. For those of you who were unable to participate this year, I urge you to consider volunteering in your community. Your local support is needed and appreciated.

Please know that your hard work in helping these organizations and the communities makes a difference. Keep up the good work.

Very special jewelry

What is something that has the U.S. Department of Energy Secretary Samuel Bodman, the National Nuclear Security Administration Administrator Linton Brooks and his Deputy Administrator for Defense Programs Tom D'Agostino (just to name a few) gushing about

Y-12?

Here's a hint: It's the first new technology developed and deployed at Y-12 since the 1980s.

It's the prototype microwave caster, which was pioneered at Y-12. After 12 years of development, one was installed this year in the production portion of Y-12.

Recent visits from Bodman, Brooks and D'Agostino included demonstrations of the microwave's capabilities. The prototype caster recently passed its readiness review, and its first official use was in June.

To recognize some individuals instrumental in the installation of the microwave and preparing the project for the readiness review, specially designed necklaces were made.

"We are considered the world's experts in this technology," said Ed Ripley, Prototype Microwave team member. "Passing the readiness review and bringing this project up to an operational status is truly a cause for celebration."

So, if you see someone with one of these unique necklaces, thank the person for putting Y-12 in the history books yet again.



Sam Lariviere, Campaigns, and Nannette Founds, NNSA Stockpile Readiness program manager, celebrate the accomplishments of the Prototype Microwave team. They are holding a copper caster from the microwave.

2 October 2005



Y-12 staff receive PRSA awards

Members of BWXT Y-12 Public
Affairs and Communications, along with
the manager of public affairs for the Y-12
Site Office of the National Nuclear Security Administration, garnered ten awards
at the annual awards ceremony of the
Volunteer chapter of the Public Relations
Society of America.

Winning publications included BWXTymes, The Renewed Spirit Quarterly Report, Retirement News and The Safeguards and Security Sentinel.

Winning displays included the "Vulnerability Assessment" and "Tennessee Valley Corridor" displays.

Awards were also won in the writing and special events categories. Entries were judged by the Central Michigan chapter of PRSA.

-Condensed from The Oak Ridger

Anderson named chief legal counsel for BWXT Y-I2

Richard "Rick" V. Anderson has been appointed chief legal counsel and managing attorney for BWXT Y-12.

Prior to joining BWXT Y-12, Anderson was senior counsel at BWXT Pantex in Amarillo, Texas.

For 19 years, Anderson served as legal counsel for BWXT's Nuclear Products Division and BWXT's Field Operations and Government Operations. For almost nine years, he was an attorney with the U.S. Environmental Protection Agency.

Anderson also served in both active and reserve capacities in the Office of the Staff Judge Advocate as a command judge advocate and instructor, and in the Judge Advocate General Corps for the U.S. Army.

-Condensed from The Oak Ridger



Richard V. Anderson, chief legal counsel and managing attorney

Leckey named chief scientist at Y-I2

John Leckey has been named chief scientist for the Y-12 National Security Complex. The role of the chief scientist is to provide leadership, guidance and strategic direction of scientific resources and capabilities for Y-12.

Working with operations, program management and national laboratories, the position serves as the focal point for the development of Y-12's long-range technical vision.

Since joining Y-12 in 1981, Leckey "has earned a tremendous reputation across the Nuclear Weapons Complex for his expertise in chemistry and materials science," Kevin Finney, Applied Technologies division manager, said in announcing Leckey's selection.

—Condensed from The Oak Ridger



John Leckey, chief scientist

Y-12 provides generators for hurricane relief



Workers load one of four trailer-mounted generators that were sent to the U.S. Army Corps of Engineers.

Sometimes good things happen so fast they almost go unnoticed. That was the case with four trailer-mounted generators that Y-12 supplied to the U.S. Army Corps of Engineers to supply emergency power during the recovery efforts from Hurricane Katrina.

Y-12 got the call saying the generators were needed, the Y-12 Site Office approved the transfer to the Corps of Engineers and less than 48 hours later the generators were on a flatbed trailer headed to Louisiana.

An official of the Corps of Engineers said two generators were needed to supply power to an emergency medical facility. Another unit was possibly destined to help power pumps in New Orleans until permanent power is restored.

Six small, portable generators may also be made available to other government agencies for the relief effort.

BWXTymes 3

CLE REPORT * SPECIAL REPORT * SPECIAL REPORT * SPECIAL REPORT * SPECIAL REPORT

Productivity and Process Improvement

Construction RFP packages are issued faster

With the explosion of construction activities, people involved in the subcontracting process knew Y-12 needed to reduce the time spent developing requests for proposals.

Since a major part of an RFP is the construction specifications, a Process Improvement Project team representing Construction, Engineering and Procurement was formed to expedite specification preparation.

"This process isn't something we could improve without the help of several organizations," said Joe Kato, Construction manager.

The team identified two major areas of improvement—a change in who is responsible for preparing construction specifications and standardization of information.

The new process calls for Engineering, instead of Construction, to prepare the general (or Division 1) construction specifications in parallel with its design deliverable.

Further, a lot of the same type of information needs to appear in each specification. Such standard information does not need to be embedded in each specification, but rather it can be developed as a separate standard reference document.

The result is two specification documents—one containing the Division 1 general requirements and the other containing the supplemental conditions—instead of one. The supplemental conditions are posted on Procurement's external website for potential bidders.

Engineering also has developed a checklist to help project engineers write Division 1 specifications.



Members of the PIP team are (from left) Hal Travis and Dale Hatcher of Engineering and Joe Kato and Bill Hevrdeys of Construction. Not pictured are John Carmack, Bill Bessom and Tom Brown of Construction and Bill Thornton of Procurement

"We're putting extra effort into standardizing our wording and format now, but the added work will pay off later," said Dale Hatcher. "Whatever we write eventually becomes part of the subcontract, so we need to be clear, concise, correct and complete."

When the project is fully implemented, the improvements are expected to reduce the cycle time for preparing the RFP package after design from 25 to 10 days—a 60 percent reduction in cycle time. A cost avoidance of almost \$2.5 million is estimated for 2005 through 2008. Actual dates for issuing construction RFPs will be analyzed quarterly to monitor the effectiveness of the process change.

Improved Human Reliability Program saves time

The approval process to participate in the Human Reliability Program used to move at a snail's pace, but the process is picking up speed because of a Process Improvement Project. The HRP ensures that Q-cleared employees in critical positions meet additional safety and security requirements.

The PIP team consisted of Mary Gaines (Personnel Security), Russ Reynolds (Occupational Health Services), Betty J. Yearwood (Wackenhut Services), Sharon Daly and Tina Ard (both of the Y-12 Site Office) and several ad hoc members. Six Sigma Black Belt Debbie Hunter provided extensive input and leadership throughout the process.

Opportunities for improvement jumped out at the team almost immediately. For example, each candidate must be scheduled

for a polygraph examination, and the scheduling process took many months. By eliminating a few process steps and rearranging workflow, 3 months have been shaved from this segment of the cycle time

In looking at the medical evaluation portion of the process, the team found that most of the candidates received two or more full medical evaluations, the exams were segmented into two parts covering a month and laboratory work was sent to an external processor for analysis.

Improvements included changing the medical evaluation annual anniversary date, consolidating the two-part medical evaluation into a one-day visit and purchasing a blood analysis machine for on-site laboratory work.

4 October 2005

Criticality safety evaluation process cuts down rework

At Y-12 we know the paperwork that documents our methods of operating safely is essential, but sometimes we can find ways of making the paper-producing process go smoother. Fortunately, a Process Improvement Project team is increasing efficiency in the criticality safety evaluation process.

The team looked at reducing the time spent evaluating and approving changes to fissile material operations. Using information from part of FY 2004 and FY 2005, they found that each new or revised CSE was changed an average of 2.5 times before it was approved.

The most common cause for the rework was not getting adequate information up front to accurately define the change. Other causes were change in scope and late comparison of the proposed change with the safety authorization basis.

The process also generated redundant and potentially confusing paperwork. The criticality safety requirements and criticality safety approvals that were also required merely duplicated information already in the CSE. The first change the PIP team recommended was creating a multidisciplined group of subject matter experts to assist with the initial walk-down of the area to cut down on scope changes and to integrate facility safety personnel into the approval process early on.

Possibly the most far-reaching recommendation was to eliminate the formal production of CSRs and CSAs altogether. All necessary limits and controls will be incorporated directly from the CSE into operating procedures and drawings.

Lloyd Jollay of Productivity and Process Improvement said, "Not only have we increased flexibility and agility, but I think we've added to the safety of our criticality safety evaluation process. I won't be surprised to see fewer deficiencies and minor noncompliances in the long run because we're putting the emphasis where it needs to be."

The identified improvements will be implemented in Enriched Uranium Operations in FY 2006, with the goal of no more than 1.5 review cycles per document. If the new process is implemented plant-wide, the total cost avoidance through CY 2008 is expected to be \$653,000—almost all in engineering costs.

Construction reduces entries into the Protected Area

Construction is increasing productivity and at the same time helping Y-12 lower the number of times vehicles enter and exit the Protected Area. As the result of a Productivity Improvement Project, Construction's center of operations is being moved to a location inside the PA. The change should reduce vehicle trips related to construction activities by an impressive 98 percent.

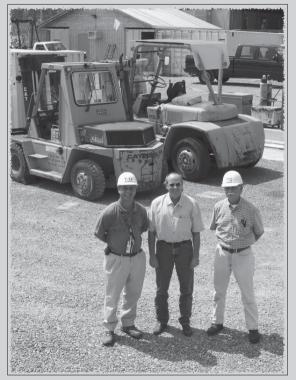
Previously, vehicles had to mobilize people and supplies to the Construction center of operations each day. Supplies like fuel, water, scaffolding, small tools and equipment had to be moved between the Property Protection Area and the PA. The solution was relocation of the support infrastructure so that materials could be left at the job site, and Construction personnel could walk directly into the PA

Tom Brown of Construction and Brian Yarbrough of Planning and Integration led the PIP team to get the new center up and running. Results of efforts by the team include installing four trailers for personnel offices and six storage vans for supplies and equipment, connecting utilities, moving the material to the new area and modifying escort agreements for non-Q-cleared workers.

Benefits of the relocation are increased productivity by having material and equipment where they are needed for work, reduced construction costs by lowering nonproductive time and improved ability to meet the schedule.

The project goal is to reduce the annual number of vehicle trips by more than 3,600 and save more than 6,297 man-hours. The cost avoidance through CY 2008 is estimated to be more than \$1 million.

Significant participants in the planning and execution of the relocation were David Stapleton and Larry Pauley of Construction and former employees Tom Porch and Jim Price.



Pictured at the new Construction center of operations are (left to right) Larry Pauley, Brian Yarbrough and Tom Brown.

BWXTymes

Fundamentals—Live by principles, not just rules

Fundamental 12—Learn from mistakes

The last fundamental is championed by Butch Clements, division manager of Safeguards and Security.

Mistakes. We all make them, but how they are handled distinguishes vibrant healthy organizations from those whose future is questionable.

Mistakes happen. Fundamental 7 noted that change is errorprone, but change is a fact of life. How we handle those mistakes is what makes or breaks us professionally and corporately.

Mistakes have consequences, but we can't let that keep us from doing the right thing. We can't afford to fix the same problem two, three or four times.

The famous philosopher, George Santayana, noted that "those who cannot remember the past are condemned to repeat it." Repeating our mistakes is exactly what we're trying to avoid with Fundamental 12.

To avoid repeating mistakes, it's vitally important that we address the root cause—not just the symptoms—and take corrective action. This type of analysis is built into Integrated Management, which integrates safety, safeguards and security—through the feedback and improvement function.

In addition to the feedback and improvement function of Integrated Management, we have many other tools at our disposal. The lessons learned system provides analysis of events across the Nuclear Weapons Complex.

12. Learn from mistakes

NASA BWXT

Butch Clements

or Car

The 12 Fundamentals Live by principles, not just rules

Internal and external assessments are essential for productive programs as they provide analysis of current operations. And, finally, many of our Six Sigma performance improvement projects provide the data necessary to improve our operations.

We also need to learn from our successes. We have many great challenges at Y-12 over the next three to five years—new facilities, design-basis threat implementation and increased expectations from our customer. We're up to those challenges, and we can minimize our mistakes by using the processes and tools at our disposal and by ensuring that we have configuration management and control of those processes.

Mistakes may be inevitable, but how we, as a company, learn from those mistakes defines our future. We must learn from our mistakes or cease to exist.



The emblems on Protective Force vehicles were recently changed to enhance Y-12 security/safety operations. Wackenhut Services worked with the National Nuclear Security Administration Y-12 Site Office fleet manager to obtain approval for the new emblem.

6 October 2005

OCTOBER

48 Years

Quality Assurance: Donna S. Ferguson 45 Years

Manufacturing: Marvin L. Sheffler **40 Years**

Applied Technologies: Jackie G. Gooch Financial Management: Doris D. Bridges Human Resources: Janice D. Rogers 35 Years

Engineering: James D. Lamaster **Facilities, Infrastructure and Services:** Charles Slay

Manufacturing: Charles L. Brock and William D. Cate Jr.

Quality Assurance: Carolyn C. Granger and George R. Jones

30 Years

Engineering: Jimmy R. Joplin
Facilities, Infrastructure and Services:
George W. Bean and Darryl E. Stair
Manufacturing: Clarence W. Berkley,
Franklin D. Clark, Robert E. Davis,



Peggy J. Gibson, Ernest J. Heyward, Earl S. Pilkay, William S. Pruitt, Judy A. Russell and Carl L. Smith

Planning and Integration: Donna H. Flicek

Quality Assurance: Pamela G. Cope, Evelyn M. Geter and Paul E. Rogers Safeguards and Security: Don R. Eblen 25 Years

Environment, Safety and Health: Roscoe W. Fields Jr. and James C. Wolard

Facilities, Infrastructure and Services:

John H. Blile, Thomas D. Collier, Larry M. Moore, David A. Phillips, Larky H. Russell and Roy K. Sharp

Financial Management: Jackie L. Hampton **Information and Materials Division:**

Donald D. Russell

Manufacturing: Gary L. Chandler, Patricia R. Foust, Robert C. Gibson, Stephen L. Hicks, Gary L. Lovelace, David A. Newman, Thomas E. Norman III, James G. Sexton, Jackie R. Thomas and Karl R. Vincent National Security Programs: Joy S. Evans Quality Assurance: Robert L. Montgomery, Anthony R. Reach, Evelyn M. Sanders and Michael N. Sherrod

Safeguards and Security: William M. Crisp 20 Years

Facilities, Infrastructure and Services:

Larry E. Belle

Manufacturing: Gina M. Nelson **Planning and Integration:** Howard K.

Obituary

When available, photographs and obituary information will be included with employee death notices.



Michael L. Thomas of Lenoir City died Sept. 17 in North Carolina. Thomas of Facilities, Infrastructure and Services had 10 years of service with the company. He was a member of Carpenters Local Union #50. He is survived by his wife, Deloris; daughter, Heather Thomas of Lenoir City; father, Clyde Thomas of Powell; sister, Lesa Ann Thomas of Kingston; and other family members.

5 tips to have a healthy work and home life

Whether you are adjusting to the 4/10 schedule or busy with your children's activities, we all can use some pointers and time-savers to help us balance the two.

- **1. Plan ahead.** Setting out clothes, packing lunches, etc., the night before can help you avoid last-minute crises.
- **2. Establish goodbye rituals.** Whether you are saying goodbye to your pets or your family members, establish a pattern for your farewells.
- **3. Make backup plans.** Surprises aren't always good ones, so it is important that you make backup plans.
- 4. Leave work issues at work. Don't bring work issues and feelings home with you. Instead, try to mentally remove yourself from work before returning home. Make notes of what you need to achieve the next day. Be realistic; unrealistic expectations for the day will increase your anxiety as you return home.
- **5. Establish returning home rituals.** It is important to establish consistent patterns for returning home after work. Exercising is a way to navigate the transition. Visit the Y-12 fitness center (see related story, page 8).

Self-help tools and other resources are available online at www.magellanhealth.com.



BWXTymes 7

On-site fitness center benefits all employees

What: Y-12's fitness center Who: All BWXTY-12

> and National Nuclear Security Administration

employees Where: Building 9710-3

When: 5 a.m. to 6 p.m., M-F

Requirements:

All non-Protective Force members must complete paperwork before using the center. Employees also must complete exercise equipment orientation, which includes sessions with the fitness staff, viewing videos and attending safety briefings.



'A completely different person'

On Aug. 30, 2003, April Wood of Facilities, Infrastructure and Services was lying on the ground after a motorcycle accident, wondering how paramedics would pick her up.

Two weeks later, her nephew, a Special Forces member, was killed in Iraq. That double blow started Wood on the road to fitness, and more than 125 pounds lighter, she is "a completely different person." She uses the on-site fitness center four or five days a week after her shift.

"I'm much more motivated and outgoing," she said. "I enjoy life a lot more. It's a good way to end the work day, and a great way to get rid of depression and frustrations.

"The equipment [at the center] is great, and the people are very helpful and professional," she said.

One of the biggest changes in Wood's life is the effect her weight loss has had on her job.

"My job is much easier," she said. "It's physical—before, I couldn't do some of it. I couldn't get up off the ground."

Now, she not only can get up off the ground but also can run, and did in the Marine Mud Run on Sept. 10. Competing in the three-mile run and obstacle course was "probably the most rewarding experience of my life," Wood said.

"I want people to know anyone can do this," she said.

BWXT_{ymes}

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